

**REMARKS**

Entry of this amendment prior to examination on the merits is respectfully requested. The Advisory Action dated August 15, 2006 has been carefully considered. Claims 1-15 and 22 are pending. Claims 16-21 have been previously withdrawn. The above amendments and the following remarks are presented in a sincere attempt to place this Application in condition for allowance. Claims 1, 8-10, and 22 have been amended in this Response. Reconsideration and allowance are respectfully requested in light of the above amendments and the following remarks.

As an initial matter, Applicants note that a Response to the Final Action was filed on Tuesday, May 23, 2006. As the Final Action is dated March 23, 2006, the two-month early response deadline under MPEP §706.07(f) is Tuesday, May 23, 2006. Accordingly, Applicants respectfully note that a Response to the Final Action was filed within two months of the Final Action.

Therefore, according to MPEP § 706.07(f), the period for reply to the Advisory Action expires on the later of (1) the date of the Advisory Action (August 15, 2006) or (2) the date set forth in the Final Rejection (June 23, 2006), and not “three months from the date of the final rejection,” as indicated by the Examiner in the Advisory Action. As August 15, 2006 is later than June 23, 2006, the period for reply to the Advisory Action expires on August 15, 2006.

Applicants respectfully note that this paper is being filed September 15, 2006, within one month from August 15, 2006. Accordingly, this Request for Continued Examination should be considered filed within one month of the Advisory Action, in accordance with MPEP § 706.07(f). Therefore, Applicants respectfully submit that an extension fee for only one month’s extension of time to file a Request for Continued Examination is required with this paper.

Regarding the Claims, Claims 8 and 10 stand objected to for a lack of antecedent basis. Accordingly, “the substrate” has been replaced by “a substrate” in Claims 8 and 10. Applicants respectfully request that the Examiner withdrawn the objections to Claims 8 and 10.

Claims 1-7, 9, 11-15, and 22 stand rejected under 35 U.S.C. § 102(b) in view of U.S. Patent 6,144,085 to Barker (“Barker”). Insofar as these rejections may be applied against the amended claims, they are traversed and should be deemed overcome.

Claim 1 has been amended to clarify a distinguishing feature of the present invention. Specifically, the integrated chip of Claim 1 comprises “a plurality of chip areas on the same chip, *wherein at least one chip area is a comparison chip area and wherein the at least one comparison chip area further comprises at least one input/output (“I/O”) device that is controlled to simulate other function I/O devices on the same chip.*” Support for this amendment can be found, among other places, page 6, lines 15-25 of the original Application.

The Barker reference does not teach, suggest, or disclose this feature of the claimed invention. Barker discloses a power transistor device that comprises a semiconductor body which accommodates an array of parallel device cells in which heat is generated in operation of the device. A hot-location sensor is located inside the array and a cool-location sensor is located outside of the array. Accordingly, “the cool-location temperature sensor Mc is located outside the array, away from the device cells in which the heat is generated.” Barker, column 6, lines 25-27. Accordingly, Barker discloses the use of a cool-location temperature sensor that is located outside of the array, which indicates that this cool-location area of the device cannot be controlled. The hot-location area of the device can be controlled by the functional devices in the array, but Barker does not disclose comparison area which is used to simulate the hot-location area.

In contrast with Barker, the claimed invention describes a comparison chip area, wherein the comparison chip area comprises at least one I/O device that is controlled to simulate other functional I/O devices on the same chip. The use of a comparison chip area enables the claimed invention to provide more precise temperature testing than Barker. In the claimed invention, a user may simulate a hot-temperature area by controlling the I/O devices in the comparison area. Subsequently, the comparable heat characteristics can be determined by the temperature sensors in the separate chip areas and a comparator. The temperature measurements between a hot-temperature area and a controlled comparison area should be similar, and if they diverge, then an error condition can be indicated. This temperature comparison can be much more precise than a measurement between an uncontrolled cool-temperature area of the chip and a hot-temperature area of the chip. This feature of the claimed invention is clearly not disclosed by Barker.

In view of the foregoing, it is apparent that the cited reference does not disclose, teach, or suggest the unique combination now recited in amended Claim 1. Applicants therefore submit that amended Claim 1 is both clearly and precisely distinguishable over the cited reference in a patentable sense. Accordingly, Applicants respectfully request that the rejection of Claim 1 under 35 U.S.C. § 102(b) in view of Barker be withdrawn and that amended Claim 1 be allowed.

Claims 2-7 depend upon and further limit amended Claim 1. Hence, for at least the aforementioned reasons, these Claims should be deemed to be in condition for allowance. Accordingly, Applicants respectfully request that the rejections of dependent Claims 2-7 also be withdrawn.

Claims 9 and 22 have been amended in a similar manner to amended Claim 1 to clarify a distinguishing feature of the claimed invention. Specifically, Claims 9 and 22 describe a comparison chip area, wherein the comparison chip area comprises at least one I/O device that is

controlled to simulate other functional I/O devices on the same chip. Hence, for at least the aforementioned reasons that amended Claim 1 is deemed to be allowable, amended Claims 9 and 22 should be deemed to be allowable. Accordingly, Applicants respectfully request that the rejections of Claims 9 and 22 under 35 U.S.C. § 102(b) in view of Barker be withdrawn and that amended Claims 9 and 22 be allowed.

Claims 11-15 depend upon and further limit amended Claim 9. Hence, for at least the aforementioned reasons, these Claims should be deemed to be in condition for allowance. Accordingly, Applicants respectfully request that the rejections of dependent Claims 11-15 also be withdrawn.

Claims 8 and 10 stand rejected under 35 U.S.C. § 103(a) in view of Barker. Insofar as these rejections may be applied against the amended claims, they are deemed overcome. Claim 8 depends upon and further limits amended Claim 1, and Claim 10 depends upon and further limits amended Claim 9. Hence, for at least the aforementioned reasons, these Claims should be deemed to be in condition for allowance. Accordingly, Applicants respectfully request that the rejections of dependent Claims 8 and 10 also be withdrawn.

Applicants have now made an earnest attempt to place this Application in condition for allowance. For the foregoing reasons and for other reasons clearly apparent, Applicants respectfully request full allowance of Claims 1-15 and 22.

Applicant hereby requests continued examination together with a one month extension of time for making this reply and hereby authorizes the Examiner to charge the required fees to Deposit Account No. 50-0605 of CARR LLP. Applicants do not believe that any other fees are due; however, in the event that any other fees are due, the Commissioner is hereby authorized to charge

any required fees due (other than issue fees), and to credit any overpayment made, in connection with the filing of this paper to Deposit Account No. 50-0605 of CARR LLP.

Should the Examiner deem that any further amendment is desirable to place this application in condition for allowance, the Examiner is invited to telephone the undersigned at the number listed below.

Respectfully submitted,

CARR LLP

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